Fig.1

Fig.2

20		
MOUNTING PROGRAM 20a	↔	**COMPONENT SUPPLY CONTROL SECTION** 22
COMPONENT DATA 20b	↔	**RECOGNITION CONTROL SECTION** 23 — **MEMORY** 23a
	↔	**POSITIONING CONTROL SECTION** 24
CPU 300	↔	**PRESSURE CONTROL SECTION** 25
INPUT / OUTPUT CONTROL SECTION 21	↔	**HEIGHT CONTROL SECTION** 26
	↔	**BOARD CONVEYANCE CONTROL SECTION** 301

Fig.3A

Fig.3B

Fig.4

```
                    ┌──────────────┐
                    │    START     │
                    └──────┬───────┘
                           │  ◄──────────────────────┐
          ┌────────────────┴────────────────┐        │
          │   MOUNTING STARTING PROCESS      │  S1    │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │   CONTROL INSTRUCTION            │  S2    │
          │   READING PROCESS                │        │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │   COMPONENT TAKE-OUT             │  S3    │
          │   PROCESS                        │        │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │ COMPONENT RECOGNIZING PROCESS,   │  S4    │
          │ CORRECTING PROCESS               │        │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │   MOUNTING POSITION              │  S5    │
          │   DETERMINING PROCESS            │        │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │   BOARD MOUNTING POSITION        │  S6    │
          │   RECOGNIZING PROCESS            │        │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │   DETERMINATION                  │  S7    │
          │   CORRECTING PROCESS             │        │
          └────────────────┬────────────────┘        │
          ┌────────────────┴────────────────┐        │
          │ COMPONENT MOUNTING PROCESS       │  S8    │
          └────────────────┬────────────────┘        │
                     ╱───────────╲    S9              │
                    ╱  IS          ╲   PRESENT         │
                   ◄ THERE NEXT      ►─────────────────┘
                    ╲ MOUNTING ?    ╱
                     ╲─────┬───────╱
                           │ ABSENT
          ┌────────────────┴────────────────┐
          │   ENDING PROCESS                 │  S10
          └────────────────┬────────────────┘
                    ┌───────┴──────┐
                    │     END      │
                    └──────────────┘
```

Fig.5A

30 — △ P_{11} P_{12} P_{13} P_{14} △ ---31
⚬ ⚬ ⚬ ⚬ 30
6

P_{21} ⚬ + + ⚬ ---31

P_{31} ⚬ + + ⚬

P_{41} ⚬ ⚬ ⚬ ⚬ 6
30 — △ P_{42} P_{43} P_{44}

⚬ ⋯201 IS PRESENT

+ ⋯201 IS ABSENT

Fig.5B

P_{LC}

$P_{1C} = 1\ 1\ 1\ 1$

$P_{2C} = 1\ 0\ 0\ 1$ 36

$P_{3C} = 1\ 0\ 0\ 1$

$P_{4C} = 1\ 1\ 1\ 1$
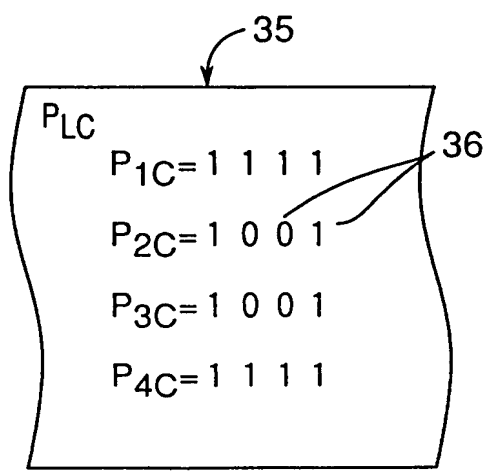
1⋯PRESENT

0⋯ABSENT

Fig.6A
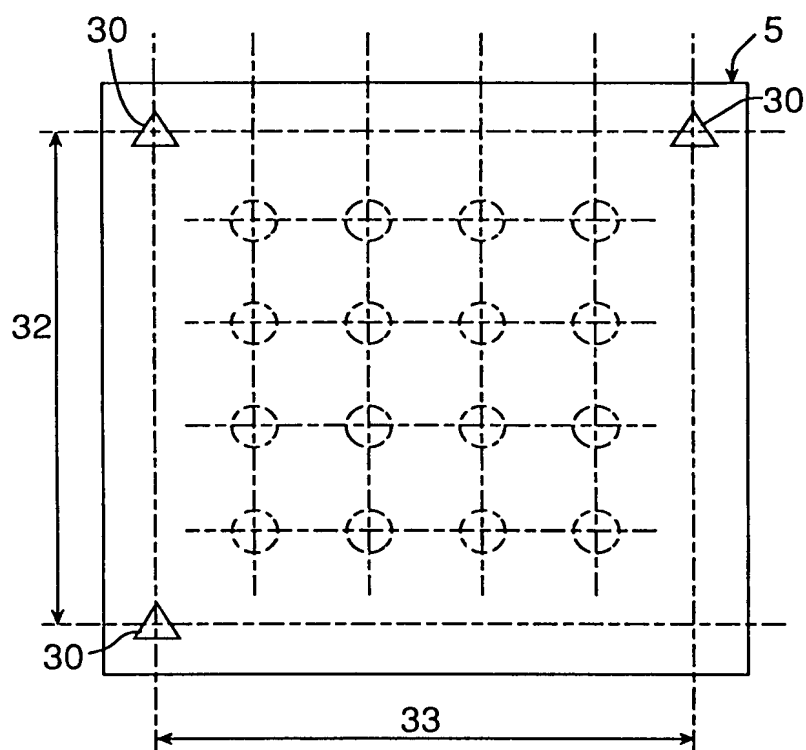
Fig.6B

Fig.7A

Fig.7B

Fig.8A

5

30a — 30a

67

30a — 30a

Fig.8B

5

30a — 30a

7

Fig.9

30   30

5

40   67
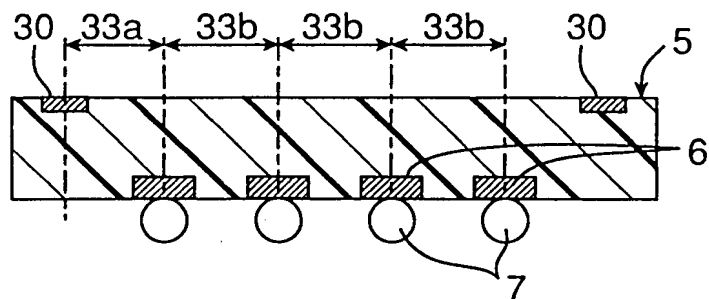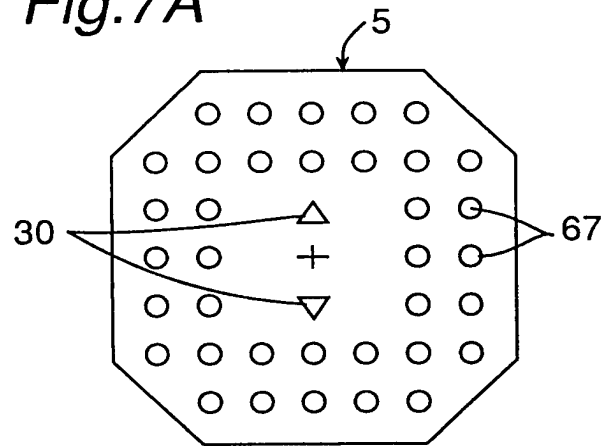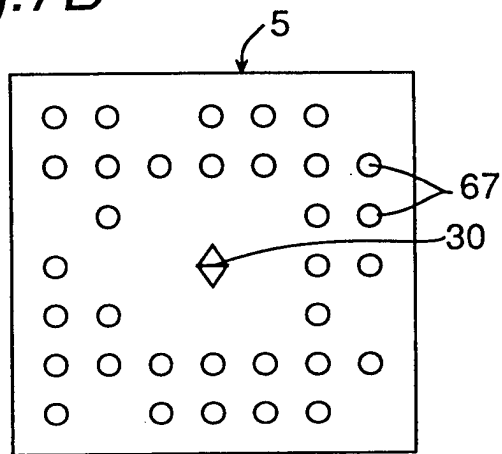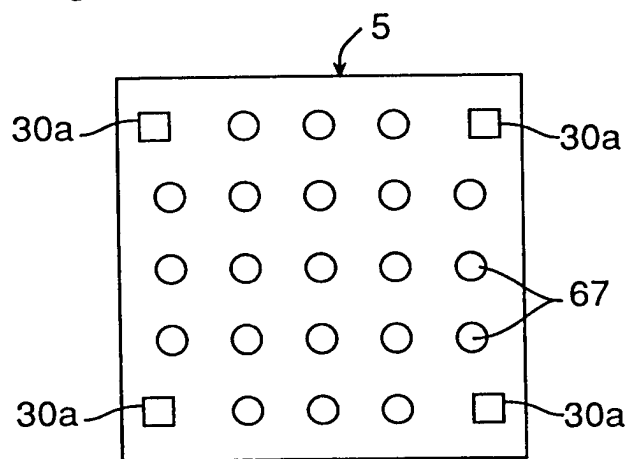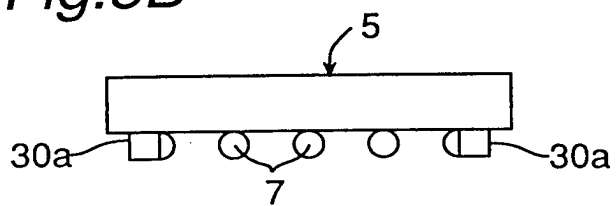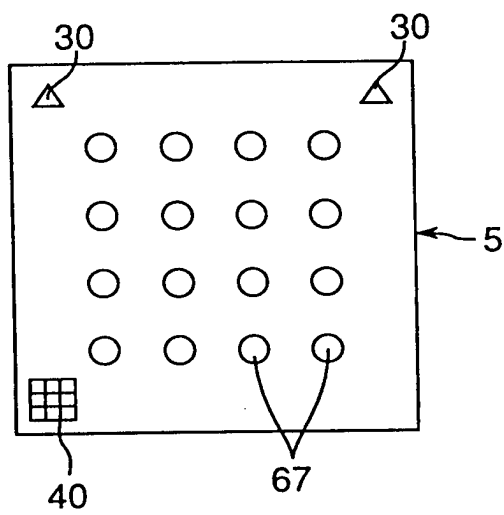
Fig.10

Fig.11A

Fig.11B

Fig.12A

100

23 RECOGNITION
CONTROL

13a

COMPONENT
INSPECTING
SECTION

COMPONENT
INSPECTING
PROCESS — 101

TWO-
DIMENSIONAL
BAR CODE
DETECTING
PROCESS — 102

Fig.12B

200

23 RECOGNITION
CONTROL

13b

BOARD
RECOGNIZING
SECTION

BOARD
RECOGNIZING
PROCESS — 201

TWO-
DIMENSIONAL
BAR CODE
DETECTING
PROCESS — 202

Fig.13A

30   6   30

5

310 310a   310b   310a

310b

7

Fig.13B

322   322a   322a

6

30   30

5

320 321

321b   321b

7

Fig.14A

5c 5c

5b

5d 5d

5e 5e

5f 5f 5f

5a

30 5f 6 5g 6 5g 6

Fig.14B

5c 5d

5

5b 5d

5e 5e

5a

30 5f 6 5g 5g 6

7 7
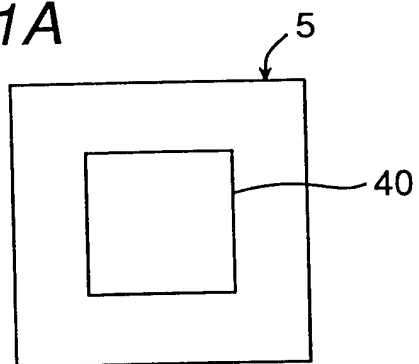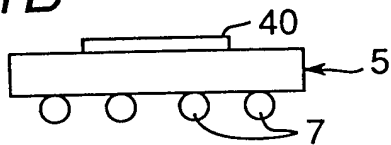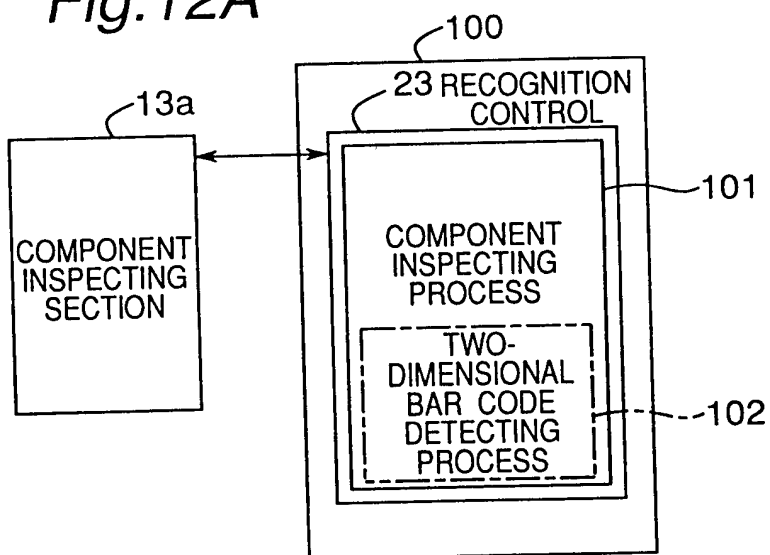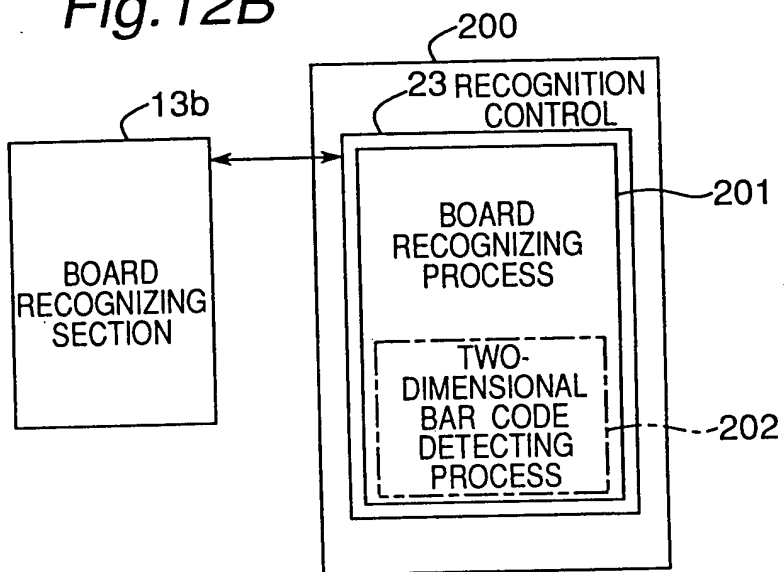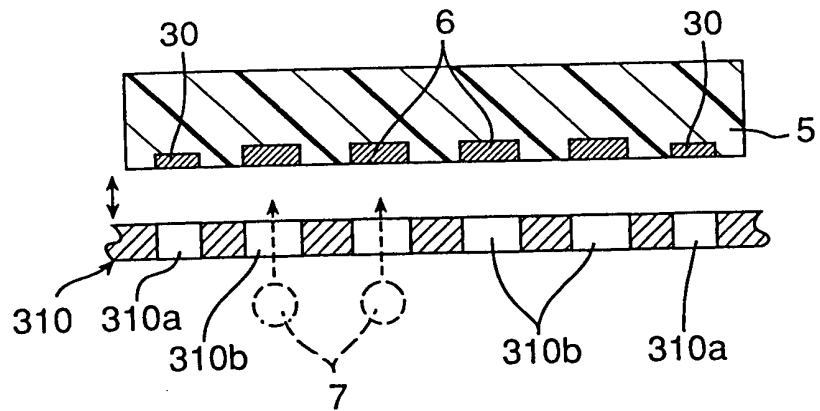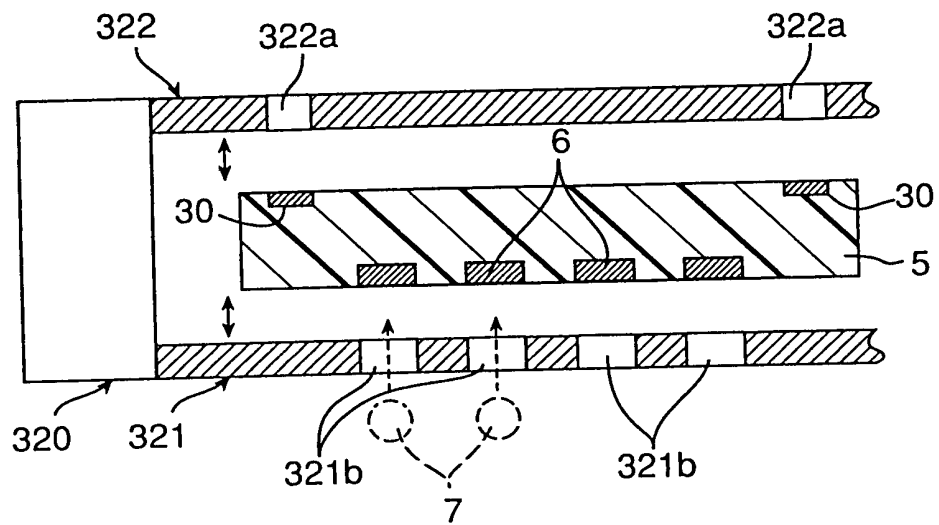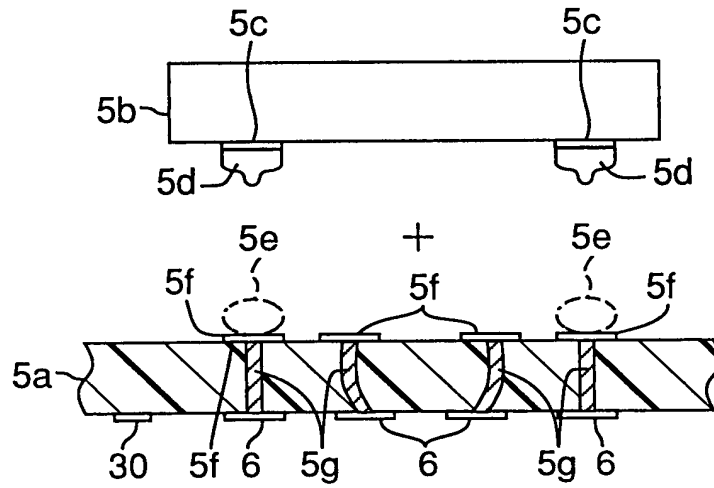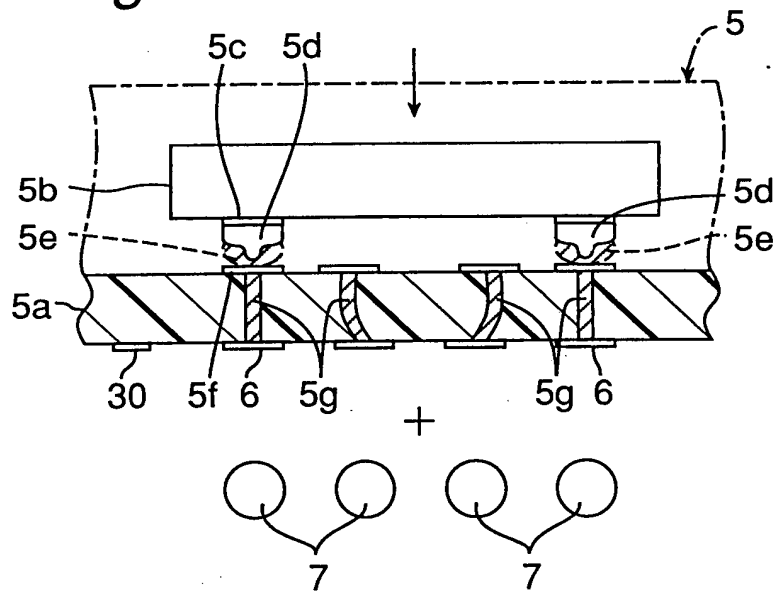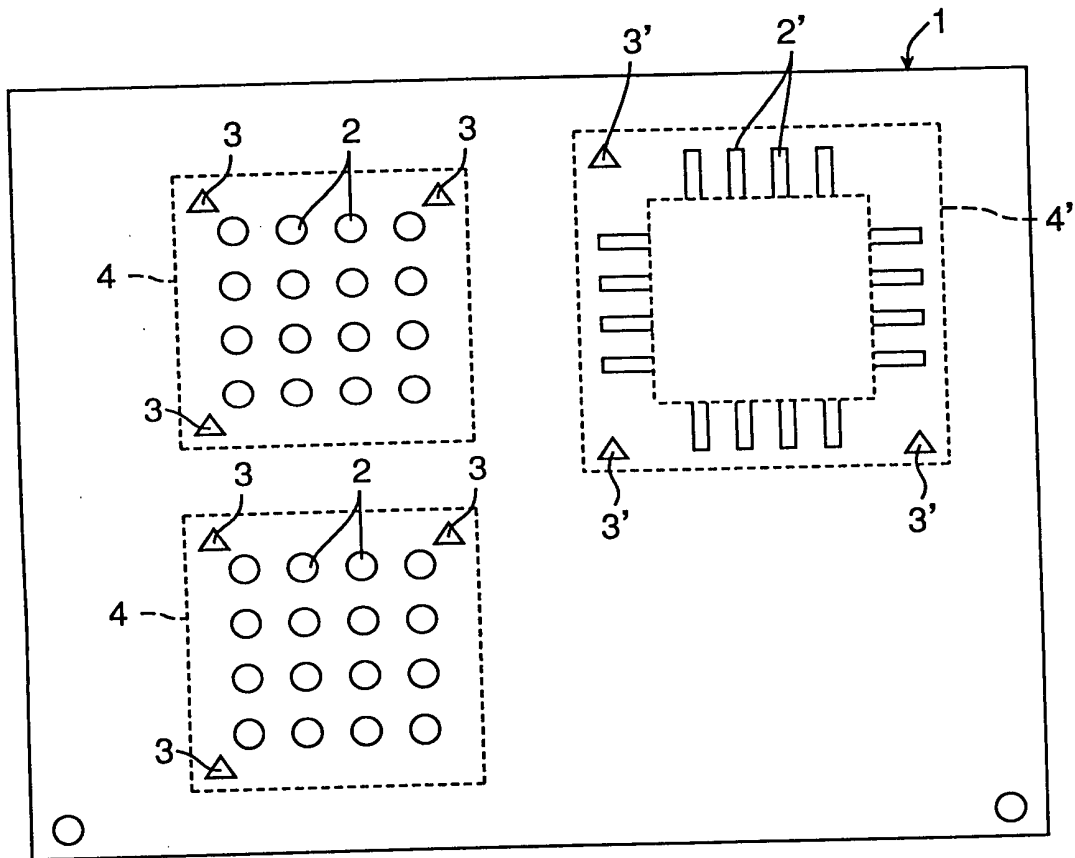
Fig.15 (PRIOR ART)

Fig.16A (PRIOR ART)

Fig.16B (PRIOR ART)

Fig. 17 (PRIOR ART)

10 11 12 13 14 15 16
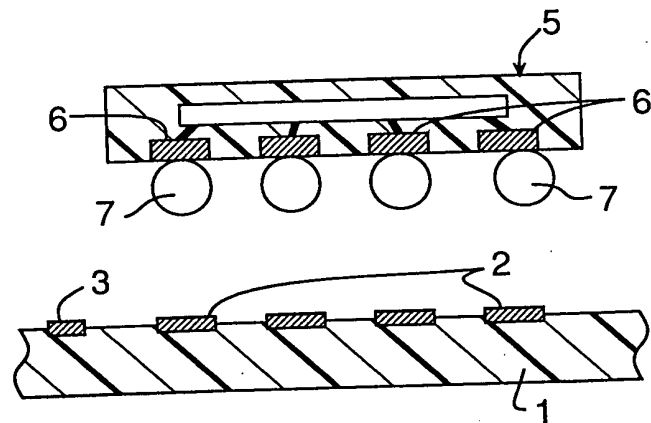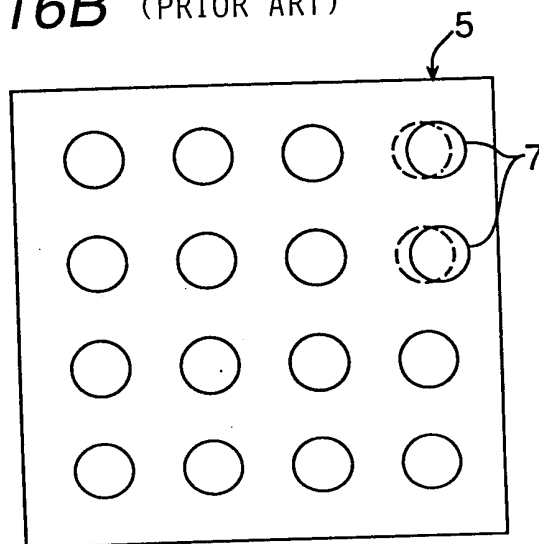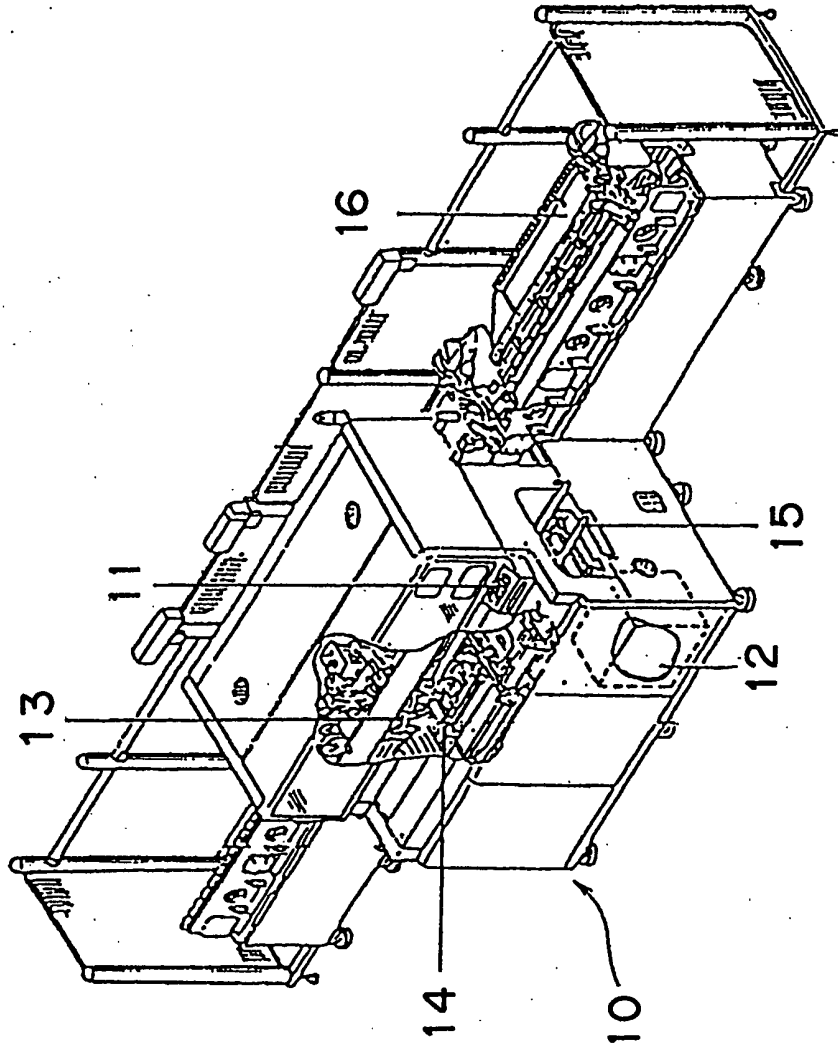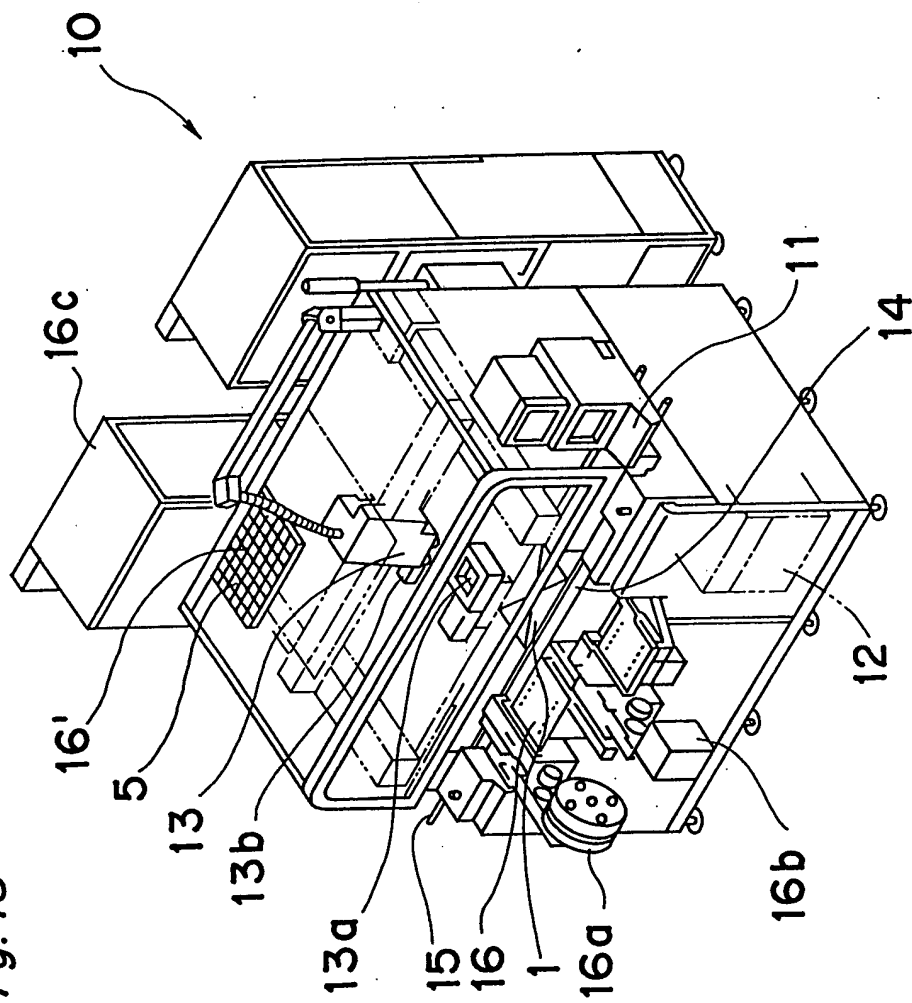
Fig.18 (PRIOR ART)

Fig.19 (PRIOR ART)
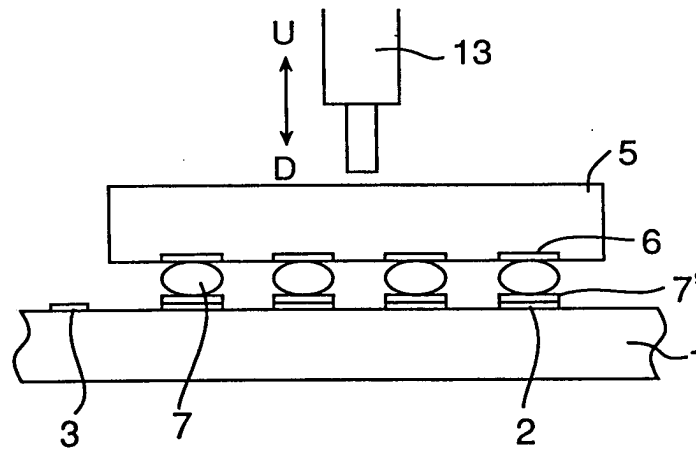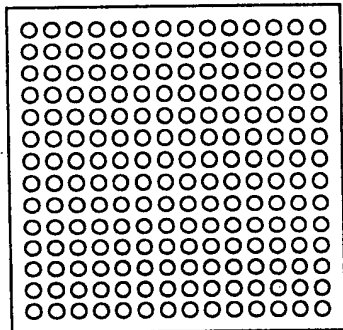
FIG. 20A (PRIOR ART)   FIG. 20B (PRIOR ART)
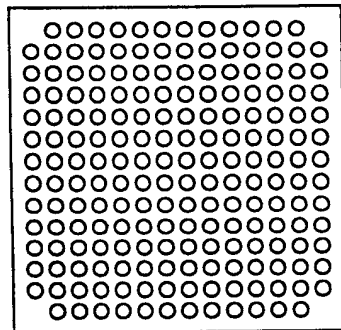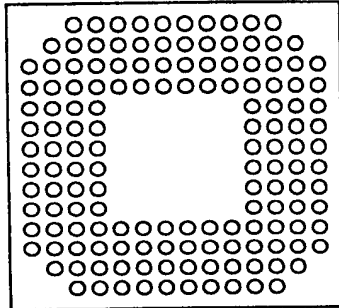
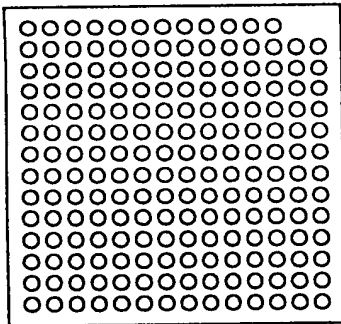FIG. 20C (PRIOR ART)   FIG. 20D (PRIOR ART)
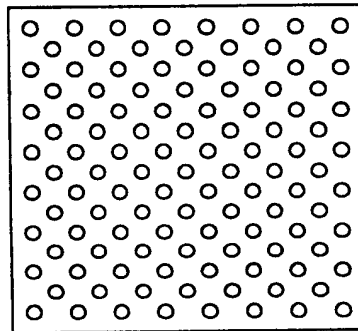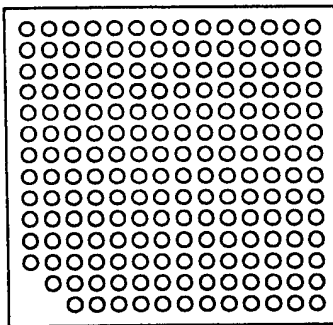
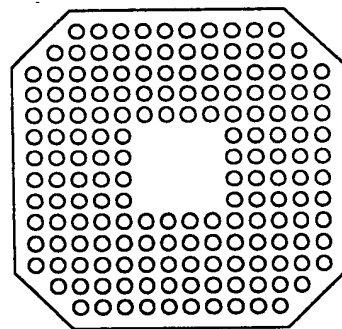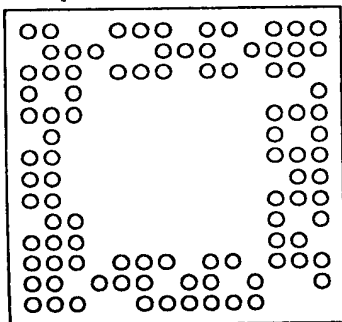FIG. 20E (PRIOR ART)   FIG. 20F (PRIOR ART)   FIG. 20G (PRIOR ART)

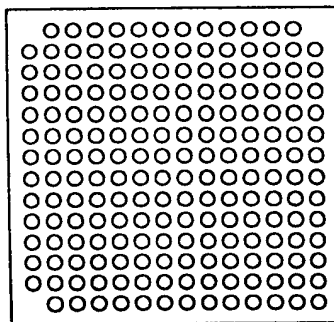FIG. 20H (PRIOR ART)   FIG. 20I (PRIOR ART)   FIG. 20J (PRIOR ART)